## **CLAIMS**

- 1. A method of treating stroke in a patient who has undergone a stroke at least three hours earlier, said method comprising delivering at least 2 million viable neuronal cells to at least one brain area involved in the stroke.
- 2. The method of claim 1 further comprising the step of using a twist drill or a burr to provide entry through the skull whereby the cells can be delivered.
- 3. The method of claim 1 wherein the cells are selected from the group consisting of hNT neuronal cells, neural stem cells, HCN-1 cells, fetal pig cells, neural crest cells or a combination thereof.
- 4. The method of claim 1 wherein the stroke has taken place at least three months earlier.
- 5. A pharmaceutical composition of human neuronal cells, the cells being at least 95% pure, said composition further comprising a vial consisting of PBS and cells, said composition further comprising a container with liquid nitrogen, whereby the composition is frozen to -170°C before use.
- 6. The pharmaceutical composition of claim 5 in which the cells are hNT cells or neural stem cells.
- 7. A method of improving speech in a person who has experienced brain damage which interferes with speech, said method comprising injecting a sterile composition of a sufficient number of neuronal cells into the damaged area.
- 8. The method of claim 7, wherein the brain damage is due to stroke.
- 9. The method of claim 7, wherein the injected neuronal cells are human neuronal cells or human stem cells.
- 10. A method of improving motor performance in a person who has experienced brain damage which interferes with movement, said method comprising injecting a sterile composition of a sufficient number of neuronal cells to the damaged area.
- 11. The method of claim 10, wherein the brain damage is due to stroke.
- 12. The method of claim 10, wherein the injected neuronal cells are human neuronal cells or neural stem cells.
- 13. A method of improving cognition in a person who has experienced brain damage which interferes with cognition, said method comprising delivering a sterile composition of a sufficient number of neuronal cells or neural stem cells to the damaged area of the brain.

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- 14. A method of improving sensory function in a person who has experienced brain damage which interferes with sensation, said method comprising delivering a sterile composition of a sufficient number of neuronal cells or neural stem cells to the damaged area.
- 15. A method of improving sensory, motor or cognitive function in a person who has experienced brain damage which interferes with those functions, said method comprising delivering a sterile composition of a sufficient number of neuronal cells or neural stem cells a location from which the neuronal cells migrate to the damaged area.
- 16. The method of claim 14, comprising delivering the composition to the cisternae.

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17. A method of replacing in an individual central nervous system nerves lost to neurodegenerative disease, trauma, ischemia or poisoning, the method comprising administering to the individual a sterile composition of a sufficient number of neuronal cells.